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  * The files listed above are temporarily unavailable.
FILE 'USPAT' ENTERED AT 14:49:19 ON 17 JUN 1997
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  *              W E L C O M E   T O   T H E                      *
  *         U. S.   P A T E N T   T E X T   F I L E               *
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=> s bacteria and stress? and (releas? or produc?)(20a)(protein or polypep?)

         44182 BACTERIA
        211424 STRESS?
        529208 RELEAS?
       1378750 PRODUC?
         53160 PROTEIN
         14711 POLYPEP?
         22211 (RELEAS? OR PRODUC?)(20A)(PROTEIN OR POLYPEP?)
L1         696 BACTERIA AND STRESS? AND (RELEAS? OR PRODUC?)(20A)(PROTEIN
OR
               POLYPEP?)
=> s l1 and stress response
        146208 STRESS
        483976 RESPONSE
           150 STRESS RESPONSE
                 (STRESS(W)RESPONSE)
L2          20 L1 AND STRESS RESPONSE
=> d 1-20

1.  5,614,399, Mar. 25, 1997, Plant ubiquitin promoter system; Peter H.
Quail, et al., 435/172.3, 69.1, 69.7, 71.1, 320.1; 536/24.1; 935/30, 36
[IMAGE AVAILABLE]

2.  5,605,885, Feb. 25, 1997, Method for stimulating the immune system;
Edward W. Bernton, et al., 514/12, 8 [IMAGE AVAILABLE]

3.  5,589,337, Dec. 31, 1996, Methods and diagnostic kits for determining
toxicity utilizing bacterial **stress** promoters fused to reporter
genes; Spencer B. Farr, 435/6, 29; 935/33, 38, 41, 43 [IMAGE AVAILABLE]

4.  5,585,232, Dec. 17, 1996, Methods and diagnostic kits for determining
toxicity utilizing E. coli **stress** promoters fused to reporter genes;
Spencer B. Farr, 435/6, 29, 252.33 [IMAGE AVAILABLE]

5.  5,569,588, Oct. 29, 1996, Methods for drug screening; Matthew Ashby,
et al., 435/6, 29, 172.1; 536/23.4, 24.1 [IMAGE AVAILABLE]

6.  5,563,324, Oct. 8, 1996, Transgenic plants with altered polyol
content; Mitchell C. Tarczynski, et al., 800/205; 47/58; 435/69.1, 70.1,
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72, 172.3, 190, 193; 800/250, DIG.43 [IMAGE AVAILABLE]

7. 5,559,220, Sep. 24, 1996, Gene encoding acetyl-coenzyme A carboxylase; Paul G. Roessler, et al., 536/23.6; 435/69.1, 134, 172.3, 197, 252.3, 257.2, 320.1, 418; 536/23.2 [IMAGE AVAILABLE]

8. 5,547,664, Aug. 20, 1996, Expression of recombinant proteins in attenuated **bacteria**; Ian G. Charles, et al., 424/93.2, 93.4, 93.48; 435/252.3, 252.8 [IMAGE AVAILABLE]

9. 5,541,077, Jul. 30, 1996, Fungal **stress** proteins; James P. Burnie, et al., 435/7.31, 7.92, 7.95; 436/530, 534, 815; 530/387.9, 388.5, 389.1 [IMAGE AVAILABLE]

10. 5,536,655, Jul. 16, 1996, Gene coding for the E1 endoglucanase; Steven R. Thomas, et al., 435/209, 69.1, 252.3, 252.31, 252.33, 253.5, 254.21, 320.1; 536/22.1, 23.1, 23.2, 23.7 [IMAGE AVAILABLE]

11. 5,510,474, Apr. 23, 1996, Plant ubiquitin promoter system; Peter H. Quail, et al., 536/24.1; 435/69.1, 69.7, 71.1, 172.3, 320.1; 935/30, 36 [IMAGE AVAILABLE]

12. 5,464,750, Nov. 7, 1995, Accumulation of heat shock proteins for evaluating biological damage due to chronic exposure of an organism to sublethal levels of pollutants; Brenda M. Sanders, et al., 435/7.21, 7.1, 7.2, 7.22, 7.31, 7.32, 29; 436/501 [IMAGE AVAILABLE]

13. 5,443,855, Aug. 22, 1995, Cosmetics and pharmaceuticals containing extensins and related methods; Barbara Wolf, et al., 424/401, 61, 70.14, 73; 514/844, 845, 846, 847, 881, 937, 938, 944 [IMAGE AVAILABLE]

14. 5,288,639, Feb. 22, 1994, Fungal **stress** proteins; James P. Burnie, et al., 435/320.1, 921, 922, 924; 530/300, 327, 328, 329, 330, 350, 371, 806, 823; 536/23.74; 935/9, 11, 12 [IMAGE AVAILABLE]

15. 5,232,833, Aug. 3, 1993, Accumulation of heat shock proteins for evaluating biological damage due to chronic exposure of an organism to sublethal levels of pollutants; Brenda M. Sanders, et al., 435/7.21, 7.2, 7.22, 7.31, 7.32, 29 [IMAGE AVAILABLE]

16. 5,212,072, May 18, 1993, Polypeptides complementary to peptides or proteins having an amino acid sequence or nucleotide coding sequence at least partially known and methods of design therefor; J. Edwin Blalock, et al., 435/69.1, 6; 514/2; 530/333 [IMAGE AVAILABLE]

17. 5,137,805, Aug. 11, 1992, Method of diagnosing **stress** condition by specific binding of human heat shock factor; Robert E. Kingston, et

al., 435/6, 7.1, 7.9; 436/501, 518, 536, 811, 815 [IMAGE AVAILABLE]

18. 5,077,195, Dec. 31, 1991, Polypeptides complementary to peptides or proteins having an amino acid sequence or nucleotide coding sequence at least partially known and methods of design therefor; J. Edwin Blalock, et al., 435/6, 5, 172.3, 803; 436/501 [IMAGE AVAILABLE]

19. 5,071,962, Dec. 10, 1991, Nucleotide, deduced amino acid sequence, isolation and purification of heat-shock chlamydial proteins; Richard P. Morrison, et al., 530/389.5, 808, 809 [IMAGE AVAILABLE]

20. 4,009,259, Feb. 22, 1977, Immersion method for treating aquatic animals; Roland W. Ament, et al., 424/184.1, 204.1, 234.1, 261.1, 601, 606, 678, 817 [IMAGE AVAILABLE]
=>

L4 ANSWER 13 OF 19 AGRICOLA
AN 95:8788 AGRICOLA
DN IND20442442
TI Growth, pectate lyase production and solute accumulation by Erwinia chrysanthemi under osmotic stress: effect of osmoprotectants.
AU Prior, B.A.; Hewitt, E.; Brandt, E.V.; Clarke, A.; Mildenhall, J.P.
CS University of the Orange Free State, Bloemfontein
AV DNAL (448.39 So12)
SO The Journal of applied bacteriology, Oct 1994. Vol. 77, No. 4. p. 433-439
Publisher: Oxford ; New York : Blackwell Scientific, 1954-
CODEN: JABAA4; ISSN: 0021-8847
NTE Includes references
CY England; United Kingdom
DT Article
FS Non-U.S. Imprint other than FAO
LA English
AB Glycine betaine strongly stimulated the growth rate of five strains of Erwinia chrysanthemi when grown in a synthetic medium at 0.986, 0.983 and 0.980 aw (NaCl) whereas in four strains, little effect was observed compared with the control. Proline, dimethyl glycine, carnitine and pipecolic acid also acted as osmoprotectants. Glutamate and trehalose, commonly accumulated by enteric **bacteria** in response to osmotic stress, failed to act as osmoprotectants when supplied exogenously. Glycine betaine and pipecolic acid partially overcame the inhibition of pectate lyase **release** by NaCl in strain ECC. 13C NMR spectroscopy of two osmotically-stressed strains showed that glycine betaine was accumulated intracellularly from synthetic media containing the exogenous osmoprotectant. However, both strains also synthesized and accumulated trehalose in addition to glycine betaine in response to osmotic stress in complex media containing glycine betaine.

L4 ANSWER 11 OF 19 TOXLINE
AN 1992:55797 TOXLINE
DN BIOSIS-92-14609
TI Effect of subinhibitory concentrations of antibiotics on extracellular Shiga-like toxin I.
AU WALTERSPIEL J N; ASHKENAZI S; MORROW A L; CLEARY T G
CS Pediatr. Infectious Dis., Univ. Texas Med. Sch., 6431 Fannin, Room JFB 1.739, Houston, Texas 77030, USA.
SO INFECTION, (1992). Vol. 20, No. 1, pp. 25-29.
CODEN: IFTNAL.
FS BIOSIS
LA English
EM 199207
AB BIOSIS COPYRIGHT: BIOL ABS. Patients with diarrhea due to strains of enterohemorrhagic Escherichia coli (EHEC) (e.g. O157:H7) might be at a higher risk of developing hemolytic uremic syndrome when treated with antimicrobial agents. It has been suggested that this might be due to an increase of **release** or production of vero or shiga-like toxin from such organisms, possibly as a **stress response** to antimicrobial agents. The aim of this study was to detect such increases in extracellular toxin in vitro with a newly developed method that exposed EHEC to high sublethal concentrations followed by a recovery phase at progressively lower concentrations. Five strains of EHEC were exposed to continuously changing concentrations of ciprofloxacin, co-trimoxazole, cefixime and tetracycline. The amount of free shiga-like toxin I (SLT-I) **released** was compared to the amount **released** from inocula that were not exposed to antibiotics. There were significant differences between the five EHEC strains in the amount of toxin detected after exposure to antimicrobial agents ($p < 0.001$). Equally important was the type of antibiotic ($p < 0.001$), with ciprofloxacin inducing the largest increase ranging from 169 to 436%, followed by co-trimoxazole, cefixime and tetracycline. In addition, the increases in free toxin correlated with the concentration of the antibiotics ($p < 0.001$). The association between antibiotic-induced increases in SLT-I produced by strains of EHEC and certain classes of antibiotics might influence the analysis of future epidemiological studies on risk factors for HUS.